

FIG. 1

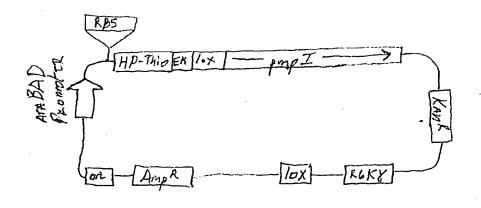


FIG. 2

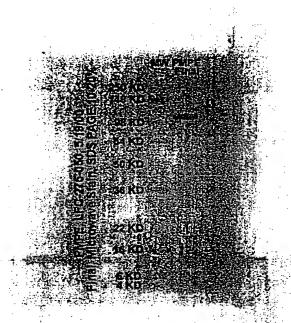


FIG. 3

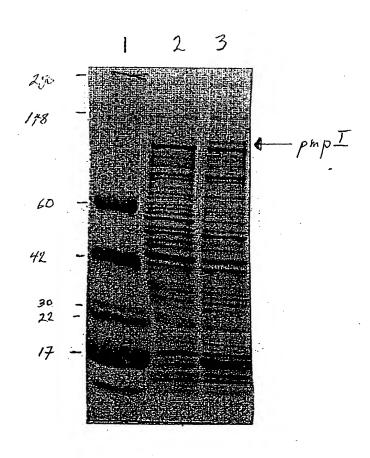


FIG. 4

atg Met 1	aaa Lys	aaa Lys	gcg Ala	ttt Phe 5	ttc Phe	ttt Phe	ttc Phe	ctt Leu	att Ile 10	gga Gly	aac Asn	tcc Ser	cta Leu	tca Ser 15	gga Gly		48
cta Leu	gct Ala	aga Arg	gag Glu 20	gtt Val	cct Pro	tct Ser	aga Arg	atc Ile 25	ttt Phe	ctt Leu	atg Met	ccc Pro	aac Asn 30	tca Ser	gtt Val		96
cca Pro	gat Asp	cct Pro 35	acg Thr	aaa Lys	gag Glu	tcg Ser	cta Leu 40	tca Ser	aat Asn	aaa Lys	att Ile	agt Ser 45	ttg Leu	aca Thr	gga Gly		144
gac Asp	act Thr 50	cac His	aat Asn	ctc Leu	act Thr	aac Asn 55	tgc Cys	tat Tyr	ctc Leu	gat Asp	aac Asn 60	cta Leu	cgc Arg	tac Tyr	ata Ile		192
Leu 65	Ala	Ile	cta Leu	Gln	Lys 70	Thr	Pro	Asn	Glu	Gly 75	Ala	Ala	Val	Thr	Ile 80	٠. ٠	240
Thr	Asp	Tyr	cta Leu	Ser 85	Phe	Phe	Asp	Thr	Gln 90	Lys	Glu	Gly	Ile	Tyr 95	Phe		288
Ala	Lys	Asn	ctc Leu 100	Thr	Pro	Glu	Ser	Gly 105	Gly	Ala	Ile	Gly	Tyr 110	Ala	Ser		336
Pro	Asn	Ser 115	cct Pro	Thr	Val	Glu	Ile 120	Arg	Asp	Thr	Ile	Gly 125	Pro	Val	Ile		384
Phe	Glu 130	Asn	aat Asn	Thr	Cys	Cys 135	Arg	Pro	Phe	Thr	Ser 140	Ser	Asn	Pro	Asn		432
Ala 145	Ala	Val	aat Asn	Lys	Ile 150	Arg	Glu	Gly	Gly	Ala 155	Ile	His	Ala	Gln	Asn 160		480
Leu	Tyr	Ile	aat Asn	His 165	Asn	His	Asp	Val	Val 170	Gly	Phe	Met	Lys	Asn 175	Phe		528
Ser	Tyr	Val	cga Arg 180	Gly	Gly	Ala	Ile	Ser 185	Thr	Ala	Asn	Thr	Phe 190	Val	Val		576
Ser	Glu	Asn 195	Gln	Ser	Cys	Phe	Leu 200	Phe	Met	Asp	Asn	11e 205	Cys	Ile	caa Gln		624
act Thr	aat Asn 210	Thr	gca Ala	gga Gly	aaa Lys	ggt Gly 215	Gly	gct Ala	atc Ile	tat Tyr	gct Ala 220	Gly	acg Thr	agc Ser	aat Asn		672

FIG. 5A

					aac Asn 230									720
_	_				atc Ile				_					768
					ttc Phe									816
	_			_	gct Ala		_		 _		_			864
_		_	_		ggc Gly		_				_	_		912
				Tyr	ggc Gly 310									· 960
	_				acc Thr					_			_	1008
					ata Ile									1056
_	_		_		att Ile			_				_		1104
	_				agt Ser	_								1152
					tcc Ser 390									1200
					ttt Phe									1248
					aat Asn									1296
					gtt Val									1344

FIG. 5B

	caa Gln	aca Thr 450	aaa Lys	aca Thr	cct Pro	gca Ala	ccc Pro 455	ctt Leu	act Thr	ctc Leu	agt Ser	aat Asn 460	ggt Gly	ttt Phe	cta Leu	tgt Cys	1392
	atc Ile 465	gaa Glu	gat Asp	cat His	gct Ala	cag Gln 470	ctt Leu	aca Thr	gtg Val	aat Asn	cga Arg 475	ttc Phe	aca Thr	caa Gln	act Thr	999 Gly 480	1440
	ggt Gly	gtt Val	gtt Val	tct Ser	ctt Leu 485	Gly ggg	aat Asn	gga Gly	gca Ala	gtt Val 490	ctg Leu	agt Ser	tgc Cys	tat Tyr	aaa Lys 495	aat Asn	1488
	ggt Gly	gca Ala	gga Gly	aat Asn 500	tct Ser	gct Ala	agc Ser	aat Asn	gcc Ala 505	tct Ser	ata Ile	aca Thr	ctg Leu	aag Lys 510	cat His	att Ile	1536
	gga Gly	Leu	aat Asn 515	ctt Leu	tct Ser	tcc Ser	att Ile	ctg Leu 520	aaa Lys	agt Ser	ggt Gly	gct Ala	gag Glu 525	att Ile	cct Pro	tta Leu	1584
						aca Thr											1632
	gca Ala 545	gct Ala	acc Thr	ttt Phe	tca Ser	tta Leu 550	agt Ser	gat Asp	gta Val	aaa Lys	ctc Leu 555	tca Ser	ctc Leu	att Ile	gat Asp	gac Asp 560	1680
	tat Tyr	Gly 999	aat Asn	tct Ser	cct Pro 565	tat Tyr	gaa Glu	tcc Ser	aca Thr	gat Asp 570	cta Leu	acc Thr	cat His	gct Ala	ctg Leu 575	tca Ser	1728
-	tca Ser	cag Gln	cct Pro	atg Met 580	cta Leu	tct Ser	att Ile	tct Ser	gag Glu 585	gct Ala	agt Ser	gat Asp	aac Asn	cag Gln 590	cta Leu	aga Arg	1776
	tct Ser	gat Asp	gat Asp 595	atg Met	gat Asp	ttt Phe	tcg Ser	gga Gly 600	cta Leu	aat Asn	gtc Val	cct Pro	cat His 605	tat Tyr	gga Gly	tgg Trp	1824
	caa Gln	gga Gly 610	ctt Leu	tgg Trp	act Thr	tgg Trp	ggc Gly 615	tgg Trp	gca Ala	aaa Lys	act Thr	caa Gln 620	gat Asp	cca Pro	gaa Glu	cca Pro	1872
	gca Ala 625	tct Ser	tca Ser	gca Ala	aca Thr	atc Ile 630	aca Thr	gat Asp	cca Pro	caa Gln	aaa Lys 635	gcc Ala	aat Asn	aga Arg	ttc Phe	cat His 640	1920
						act Thr											1968
	aaa Lys	cac His	aga Arg	agt Ser 660	ccc Pro	ctc Leu	ata Ile	gcg Ala	aat Asn 665	acc Thr	tta Leu	tgg Trp	ggg ggg	aat Asn 670	atg Met	ctg Leu	2016

FIG. 5C

ctt Leu	gca Ala	aca Thr 675	gaa Glu	agc Ser	tta Leu	aaa Lys	aat Asn 680	agt Ser	gca Ala	gaa Glu	ctg Leu	aca Thr 685	cct Pro	agt Ser	gat Asp	2064
cat His	cct Pro 690	ttc Phe	tgg Trp	gga Gly	att Ile	aca Thr 695	gga Gly	gga Gly	gga Gly	cta Leu	ggc Gly 700	atg Met	atg Met	gtt Val	tac Tyr	2112
caa Gln 705	gat Asp	cct Pro	cga Arg	gaa Glu	aat Asn 710	cat His	cct Pro	gga Gly	ttc Phe	cat His 715	atg Met	cgc Arg	tct Ser	tcc Ser	gga Gly 720	2160
tac Tyr	tct Ser	gcg Ala	gly ggg	atg Met 725	ata Ile	gca Ala	ggg Gly	cag Gln	aca Thr 730	cac His	acc Thr	ttc Phe	tca Ser	ttg Leu 735	aaa Lys	2208
ttc Phe	agt Ser	cag Gln	acc Thr 740	tac Tyr	acc Thr	aaa Lys	ctc Leu	aat Asn 745	gag Glu	cgt Arg	tac Tyr	gca Ala	aaa Lys 750	aac Asn	aac Asn	2256
gta Val	tct Ser	tct Ser 755	aaa Lys	aat Asn	tac Tyr	tca Ser	tgc Cys 760	caa Gln	gga Gly	gaa Glu	atg Met	ctc Leu 765	ttc Phe	tca Ser	ttg Leu	2304
caa Gln	gaa Glu 770	ggt Gly	ttc Phe	ttg Leu	ctg Leu	act Thr 775	aaa Lys	tta Leu	gtt Val	Gly 999	ctt Leu 780	tac Tyr	agc Ser	tat Tyr	gga Gly	2352
gac Asp 785	cat His	aac Asn	tgt Cys	cac His	cat His 790	ttc Phe	tat Tyr	acc Thr	Gln	gga Gly _795	gaa Glu	aat Asn	cta Leu	aca Thr	tct Ser 800	2400
caa Gln	Gly 999	acg Thr	ttc Phe	cgt Arg 805	agt Ser	caa Gln	acg Thr	atg Met	gga Gly 810	ggt Gly	gct Ala	gtt Val	ttt Phe	ttt Phe 815	gat Asp	2448
ctc Leu	cct Pro	atg Met	aaa Lys 820	ccc Pro	ttt Phe	gga Gly	tca Ser	acg Thr 825	cat His	ata Ile	ctg Leu	aca Thr	gct Ala 830	ccc Pro	ttt Phe	2496
Leu	ggt Gly	Ala 835	Leu	Gly	Ile	Tyr	Ser 840	Ser	Leu	Ser	His	Phe 845	Thr	Glu	Val	2544
gga Gly	gcc Ala 850	tat Tyr	ccg Pro	cga Arg	agc Ser	ttt Phe 855	tct Ser	aca Thr	aag Lys	act Thr	cct Pro 860	ttg Leu	atc Ile	aat Asn	gtc Val	2592
cta Leu 865	gtc Val	cct Pro	att Ile	gga Gly	gtt Val 870	aaa Lys	ggt Gly	agc Ser	ttt Phe	atg Met 875	aat Asn	gct Ala	acc Thr	caa Gln	aga Arg 880	2640
cct Pro	caa Gln	gcc Ala	tgg Trp	act Thr 885	gta Val	gaa Glu	ttg Leu	gca Ala	tac Tyr 890	caa Gln	ccc Pro	gtt Val	ctg Leu	tat Tyr 895	aga Arg	2688

FIG. 5D

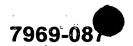
gaa Glu			Ala	Gln	Leu					2736
ggt Gly										2784
cag Gln 930									tat Tyr	 2832
gga Gly										2880
gct Ala	_	_	tag				·			2898

															-		-
atg Met 1	cga Arg	cct Pro	gat Asp	cat His 5	atg Met	aac Asn	ttc Phe	tgt Cys	tgt Cys 10	cta Leu	tgt Cys	gct Ala	gct Ala	att Ile 15	ttg Leu		48
tca Ser	tcc Ser	aca Thr	gcg Ala 20	gtc Val	ctc Leu	ttt Phe	ggc Gly	cag Gln 25	gat Asp	ccc Pro	tta Leu	ggt Gly	gaa Glu 30	acc Thr	gcc Ala		96
ctc Leu	ctc Leu	act Thr 35	aaa Lys	aat Asn	cct Pro	aat Asn	cat His 40	gtc Val	gtc Val	tgt Cys	aca Thr	ttt Phe 45	ttt Phe	gag Glu	gac Asp		144
tgt Cys	acc Thr 50	atg Met	gag Glu	agc Ser	ctc Leu	ttt Phe 55	cct Pro	gct Ala	ctt Leu	tgt Cys	gct Ala 60	cat His	gca Ala	tca Ser	caa Gln		192
gac Asp 65	gat Asp	cct Pro	ttg Leu	tat Tyr	gta Val 70	ctt Leu	gga Gly	aat Asn	tcc Ser	tac Tyr 75	tgt Cys	tgg Trp	ttc Phe	gta Val	ser 80	-	240
aaa Lys	ctc Leu	cat His	atc Ile	acg Thr 85	gac Asp	ccc Pro	aaa Lys	gag Glu	gct Ala 90	ctt Leu	ttt Phe	aaa Lys	gaa Glú	aaa Lys 95	gga Gly		288
gat Asp	ctt Leu	tcc Ser	att Ile 100	caa Gln	aac Asn	ttt Phe	cgc Arg	ttc Phe 105	ctt Leu	tcc Ser	ttc Phe	aca Thr	gat Asp 11.0	tgc Cys	tct Ser		336
tcc Ser	aag Lys	gaa Glu 115	agc Ser	tct Ser	cct Pro	tct Ser	att Ile 120	att Ile	cat His	caa Gln	aag Lys	aat Asn 125	Gly	cag Gln	tta Leu		384
Ser	Leu 130	Arg	Asn	Asn	Gly	agc Ser 135	Met	Ser	Phe	Cys	Arg 140	Asn	His	Ala	Glu		432
ggc Gly 145	tct Ser	gga Gly	gga Gly	gcc Ala	atc Ile 150	tct Ser	gcg Ala	gat Asp	gcc Ala	ttt Phe 155	tct Ser	cta Leu	cag Gln	cac His	aac Asn 160		480
tat Tyr	ctt Leu	ttc Phe	aca Thr	gct Ala 165	ttt Phe	gaa Glu	gag Glu	aat Asn	tct Ser 170	tct Ser	aaa Lys	gga Gly	aat Asn	ggc Gly 175	gga Gly		528
gcc Ala	att Ile	cag Gln	gct Ala 180	caa Gln	acc Thr	ttc Phe	tct Ser	tta Leu 185	tct Ser	aga Arg	aat Asn	gtg Val	Ser 190	cct Pro	att Ile		576
Ser	Phe	Ala 195	Arg	Asn	Arg	gcg Ala	Asp 200	Leu	Asn	Gly	Gly	Ala 205	Ile	Cys	Cys		624
agt Ser	aat Asn 210	ctt Leu	att Ile	tgt Cys	tca Ser	999 Gly 215	aat Asn	gta Val	aac Asn	cct Pro	ctc Leu 220	Phe	ttc Phe	act Thr	gga Gly		672

FIG. 6A

						ggc Gly									720
						ctc Leu									768
						aaa Lys									816
						aac Asn									864
					_	atc Ile 295	_		_			 _			912
						tct Ser								_	960
						gta Val									1008
				Ser		gaa Glu	Āla	_			_				1056
			_		_	agt Ser	_	_		-	_				1104
						act Thr 375									1152
						gca Ala						_	_	_	1200
_		•	_	_	_	aaa Lys			_						1248
						aaa Lys									1296
-	_			-		tct Ser			_	_		_			1344

## FIG. 6B



## (SHEET /2 OF /4)

		٠	· · · · · · · · · · · · ·				٠.					- 1				
att Ile	atg Met 450	gaa Glu	gcg Ala	gga Gly	act Thr	tct Ser 455	tta Leu	aaa Lys	act Thr	tcc Ser	ser 460	gat Asp	ttg Leu	aag Lys	tta Leu	1392
gct Ala 465	acg Thr	cta Leu	agt Ser	att Ile	ccc Pro 470	ctt Leu	cat His	tcc Ser	tta Leu	gat Asp 475	act Thr	gaa Glu	aaa Lys	agc Ser	gta Val 480	1440
act Thr	atc Ile	cac His	gcc Ala	cct Pro 485	aac Asn	ctt Leu	tct Ser	atc Ile	caa Gln 490	aag Lys	atc Ile	ttc Phe	ctc Leu	tct Ser 495	aat Asn	1488
							gaa Glu									1536
							act Thr 520									1584
cat His	ctt Leu 530	cct Pro	gat Asp	Gly 999	aac Asn	ctc Leu 535	tct Ser	tct Ser	cac His	ttt Phe	gga Gly 540	tat Tyr	caa Gln	gga Gly	gat Asp	1632
tgg Trp 545	act Thr	ttt Phe	tct Ser	tgg Trp	aaa Lys 550	gat Asp	tct Ser	gat Asp	gaa Glu	999 Gly 555	cat His	tct Ser	ctg Leu	att Ile	gct Ala 560	1680
aat Asn	tgg Trp	Thr	cct Pro	Lys	aac Asn	tat Tyr	gtg Val	Pro	cat His 570	cca Pro	gaa Glu	cgt Arg	caa Gln	tct Ser 575	aca Thr	1728
ctc Leu	gtt Val	gcg Ala	aac Asn 580	act Thr	ctt Leu	tgg Trp	aac Asn	acc Thr 585	tat Tyr	tcc Ser	gat Asp	atg Met	caa Gln 590	gct Ala	gtg Val	1776
cag Gln	tcg Ser	atg Met 595	att Ile	aat Asn	aca Thr	ata Ile	gcg Ala 600	cac His	gga Gly	gga Gly	gcc Ala	tat Tyr 605	cta Leu	ttt Phe	gga Gly	1824
acg Thr	tgg Trp 610	gga Gly	tct Ser	gct Ala	gtt Val	tct Ser 615	aat Asn	tta Leu	ttc Phe	tat Tyr	gct Ala 620	cac His	gac Asp	agc Ser	tct Ser	1872
999 Gly 625	aaa Lys	cct Pro	atc Ile	gat Asp	aat Asn 630	tgg Trp	cat His	cat His	aga Arg	agc Ser 635	ctt Leu	ggc Gly	tac Tyr	cta Leu	ttc Phe 640	1920
ggt Gly	atc Ile	agt Ser	act Thr	cac His 645	agt Ser	tta Leu	gat Asp	gac Asp	cat His 650	tct Ser	ttc Phe	tgc Cys	ttg Leu	gct Ala 655	gca Ala	1968
gga Gly	caa Gln	Leu	ctc Leu 660	999 Gly	aaa Lys	tcg Ser	tcc Ser	gat Asp 665	tcc Ser	ttt Phe	att Ile	acg Thr	tct Ser 670	aca Thr	gaa Glu	2016

FIG. 6C



## (SHEET /3 OF /4)

acg Thr	acc Thr	tcc Ser 675	tat Tyr	ata Ile	gct Ala	act Thr	gta Val 680	caa Gln	gcg Ala	caa Gln	ctc Leu	gct Ala 685	acc Thr	tct Ser	cta Leu	2064
atg Met	aaa Lys 690	atc Ile	tct Ser	gca Ala	cag Gln	gca Ala 695	tgc Cys	tac <b>T</b> yr	aat Asn	gaa Glu	agt Ser 700	atc Ile	cat His	gag Glu	cta Leu	2112
aaa Lys 705	aca Thr	aaa Lys	tat Tyr	cgc Arg	tcc Ser 710	ttc Phe	tct Ser	aaa Lys	gaa Glu	gga Gly 715	ttc Phe	gga Gly	tcc Ser	tgg Trp	cat His 720	2160
agc Ser	gtt Val	gca Ala	gta Val	tcc Ser 725	gga Gly	gaa Glu	gtg Val	tgc Cys	gca Ala 730	tcg Ser	att Ile	cct Pro	att Ile	gta Val 735	tcc Ser	2208
aat Asn	ggt Gly	tcc Ser	gga Gly 740	ctg Leu	ttc Phe	agc Ser	tcc Ser	ttc Phe 745	tct Ser	att Ile	ttc Phe	tct Ser	aaa Lys 750	ctg Leu	caa Gln	2256
gga Gly	ttt Phe	tca Ser 755	gga Gly	aca Thr	cag Gln	gac Asp	ggt Gly 760	ttt Phe	gag Glu	gag Glu	agt Ser	tcg Ser 765	gga Gly	gag Glu	att Ile	2304
cgg Arg	tcc Ser 770	ttt Phe	tct Ser	gcc Ala	agc Ser	tct Ser 775	ttc Phe	aga Arg	aat Asn	att Ile	tca Ser 780	ctt Leu	cct Pro	ata Ile	gga Gly	2352
ata Ile 785	aca Thr	ttt Phe	gaa Glu	aaa Lys	aaa Lys 790	tcc Ser	caa Gln	aaa Lys	aca Thr	cga Arg 795	acc Thr	tac Tyr	tat Tyr	tac Tyr	Phe 800	2400
Leu	Gly	Ala	Tyr	Ile 805	Gln	gac Asp	Leu	Lys	Arg 810	Asp	Val	Glu	Ser	Gly 815	Pro	2448
Val	Val	Leu	Leu 820	Lys	Asn	gcc Ala	Val	Ser 825	Trp	Asp	Ala	Pro	Met 830	Ala	Asn	2496
Leu	Asp	Ser 835	Arg	Ala	Tyr	atg Met	Phe 840	Arg	Leu	Thr	Asn	Gln 845	Arg	Ala	Leu	2544
cac His	aga Arg 850	ctt Leu	cag Gln	acg Thr	ctg Leu	tta Leu 855	aat Asn	gtg Val	tct Ser	tgt Cys	gtg Val 860	ctg Leu	cgt Arg	Gly	caa Gln	2592
agc Ser 865	cat His	agt Ser	tac Tyr	tcc Ser	ctg Leu 870	gat Asp	ctg Leu	GJÀ aaa	acc Thr	act Thr 875	tac Tyr	agg Arg	ttc Phe			2634
tag																2637

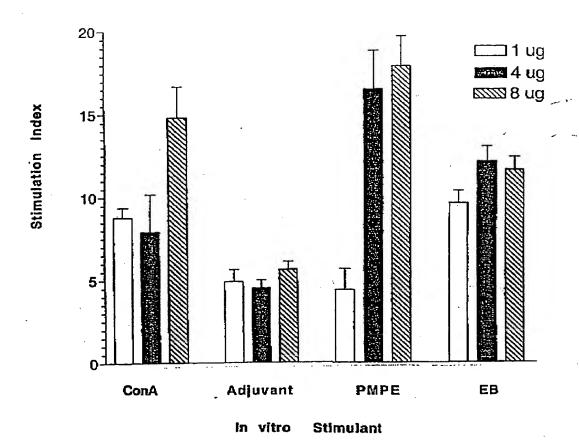


FIG. 7